

IN THE CLAIMS

The following is a complete listing of the claims in this application, reflects all changes currently being made to the claims, and replaces all earlier versions and all earlier listings of the claims:

Claim 1 (Currently Amended): An intervertebral implant [(1)], specifically an artificial intervertebral disk, comprising a central axis [(2)] and

A) an upper plate-shaped section [(10)], suitable for laying onto the base plate of a vertebral body lying above, wherein the upper section [(10)] is provided with one ventral side area [(11)], one dorsal side area [(12)], two lateral side areas [(13;14)], an upper apposition surface [(15)] and a lower surface [(16)];

B) and a lower plate-shaped section [(30)] suitable for laying onto the cover plate of a vertebral body lying below, wherein the upper section [(20)] is provided with one ventral side area [(31)], one dorsal side area [(32)], two lateral side areas [(33;34)], an upper apposition surface [(35)] and a lower surface [(36)], wherein

C) between the upper and lower section [(10;30)], a central, plate-shaped section [(20)] is arranged, wherein the central section [(20)] is provided with a ventral side surface [(21)], a dorsal side surface [(22)], two lateral side surfaces [(23;24)], a lower surface [(25)] facing the lower section [(30)] and an upper surface [(26)] facing the upper section [(10)];

D) between the upper section [(10)] and the central section [(20)], a first circular-cylindrical rod [(40)] with a longitudinal axis [(41)] is arranged in an antero-posterior orientation and intersects the central axis; and

E) between the lower section [(30)] and the central section [(20)], a second circular-cylindrical rod [(50)] with a longitudinal axis [(51)] is arranged in a medio-lateral orientation and parallel with the central axis.

Claim 2 (Currently Amended): The intervertebral implant [(1)] according to claim 1, wherein the lower surface [(16)] of the first section [(10)] and the upper surface [(26)] of the central section [(20)] are formed as sliding surfaces for the first, circular-cylindrical rod [(40)] that come in contact with them.

Claim 3 (Currently Amended): The intervertebral implant [(1)] according to claim 2, wherein the two sliding surfaces [(16;26)] for the first circular-cylindrical rod (40) ~~are formed as flat, circular-cylindrical or conical planes~~ have a concave and circular-cylindrical arrangement.

Claim 4 (Currently Amended): The intervertebral implant [(1)] according to claim 1, wherein the lower surface [(25)] of the central plate-shaped section [(20)] and the upper surface [(36)] of the lower plate-shaped section [(30)] are formed as sliding surfaces for the second, circular-cylindrical rod [(50)] that come in contact with them.

Claim 5 (Currently Amended): The intervertebral implant [(1)] according to claim 4, wherein the two sliding surfaces [(25;36)] for the second, circular-cylindrical rod (50) ~~are formed as flat, circular-cylindrical or conical planes~~ have a concave and circular-cylindrical arrangement.

Claim 6 (Currently Amended): The intervertebral implant [(1)] according to claim 2, wherein one or more of the sliding surfaces [(16;26;25;36)] is provided at least partially with a peripheral perimeter [(70)].

Claim 7 (Currently Amended): The intervertebral implant [(1)] according to claim 2, wherein a number of limits/stops [(80)] are provided on one or more of the sliding surfaces [(16;26;25;36)] for the rotation of the cylindrical rods [(40;50)] around the central [[axle]]

axis (2).

Claim 8 (Currently Amended): The intervertebral implant [(1)] according to claim 2, wherein a pair of grooves [(17;27;28;37)] is provided as a bearing for the first and/or second rod [(40;50)] on one or both of the sliding surface pairs [(16;26;25;36)] formed by the four sliding surfaces [(16;26;25;36)].

Claim 9 (Currently Amended): The intervertebral implant [(1)] according to claim 8, wherein the pair of grooves [(17;27;28;37)] is congruent to the circular-cylindrical rods [(40;50)] carried therein.

Claim 10 (Currently Amended): The intervertebral implant [(1)] according to claim 8, wherein at least one pair of grooves [(17;27;28;37)] is designed incongruent to the circular-cylindrical rods [(40;50)] it has to bear and is preferably provided with a width that allows a limited rotation of the rods [(40;50)] around the central ~~axe~~ (2) axis in the grooves [(17;27;28;37)].

Claim 11 (Currently Amended): The intervertebral implant [(1)] according to claim 8, wherein at least one section of the grooves [(17;27;28;37)] is provided with a limit/stop [(75)] attached on the periphery to prevent axial shifting of the rod [(40;50)] carried therein.

Claim 12 (Currently Amended): The intervertebral implant [(1)] according to claim 8, wherein the one pair of grooves [(17;27)] for the first rod [(40)] runs from the ventral to the dorsal side surfaces [(11;21;31;12;22;32)] of the corresponding plate-shaped sections [(10;20;30)] and the second pair of grooves [(28;37)] for the second rod [(50)] runs between the lateral side surfaces [(13;14;23;24;33;34)] of the corresponding plate-shaped

sections [(10;20;30)].

Claim 13 (Currently Amended): The intervertebral implant [(1)] according to claim 7, wherein the limits/stops [(80)] are arranged so that the longitudinal axis [(41)] of the first rod [(40)] intersects the ventral and dorsal side surfaces [(11;21;31;12;22;32)] of the corresponding plate-shaped sections [(10;20;30)], and that the longitudinal axis [(51)] of the second rod [(50)] intersects the lateral side surfaces [(13;14;23;24;33;34)] of the corresponding plate-shaped sections [(10;20;30)].

Claim 14 (Currently Amended): The intervertebral implant [(1)] according to claim 1, wherein [(an)] elastically malleable means ~~(60) is provided that holds~~ hold the upper and lower plate-shaped sections [(10;30)] together with the intermediate lying central plate-shaped section [(20)] and the two rods [(40;50)].

Claim 15 (Currently Amended): The intervertebral implant [(1)] according to claim 14, wherein the elastically malleable means ~~(60) is provided as~~ are springs [(61)] or elastomer connection elements.

Claim 16 (Currently Amended): The intervertebral implant [(1)] according to claim 2, wherein the four sliding surfaces [(16;25;26;36)] and the two rods [(40,50)] are made of metal.

Claim 17 (Currently Amended): The intervertebral implant [(1)] according to claim 2, wherein the four sliding surfaces [(16;25;26;36)] are made of metal and the two rods [(40,50)] are made of ceramic.

Claim 18 (Currently Amended): The intervertebral implant [(1)] according to claim 1,

wherein insertion means [(90)] are provided that are suitable to create temporary blocking of the mobility of the three plate-shaped sections [(10;20;30)] relative to each other.

Claim 19 (Currently Amended): The intervertebral implant [(1)] according to claim 18, wherein the insertion means [(90)] on the two ventral side surfaces [(11;21;31)] can be attached to the three plate-shaped sections [(10;20;30)].

Claim 20 (Currently Amended): The intervertebral implant [(1)] according to claim 18, wherein the insertion means [(90)] comprise an insert [(91)] with a lower end [(95)] and an upper end [(96)] and a depression [(92;93)] in the surfaces [(16;36)] on each of the two external plate-shaped sections [(10;30)], which are open on the ventral side surfaces [(11;31)] of the two external plate-shaped sections [(10;30)], and that the insert [(91)] can be inserted with its ends [(95;96)] into each of the two depressions [(92;93)].

Claim 21 (Currently Amended): The intervertebral implant [(1)] according to claim 20, wherein the depressions [(42;43)] are dovetail guides and the ends [(45;46)] on the insert [(41)] are arranged complementary to these dovetail guides.

Claim 22 (Currently Amended): The intervertebral implant [(1)] according to claim 21, wherein the dovetail guides are tapered from the ventral side surfaces [(11;31)] of the two external plate-shaped sections [(10;30)] towards the dorsal side surfaces [(12;32)] of the two external plate-shaped sections [(10;30)].

Claim 23 (Currently Amended): A process for the replacement of a defective, natural intervertebral disk ~~characterised~~ by an intervertebral implant [(1)], comprising the steps of:

A) blocking of the joint(s) [(38;39)] of an intervertebral implant [(1)] through the ~~special~~ insertion means [(90)] in a certain position of the joint(s) [(38;39)];

B) insertion of the intervertebral implant [(1)] into the intervertebral space to be treated; and

C) release and removal of the insertion means ~~device (90)~~ inserted into the intervertebral implant [(1)] for blocking the joint(s) [(38;39)].

Claim 24 (Currently Amended): The process according to claim 23, additionally comprising the step of the subsequent blocking of the joint(s) [(38;39)] on the implanted intervertebral implant [(1)] through the insertion means [(90)].